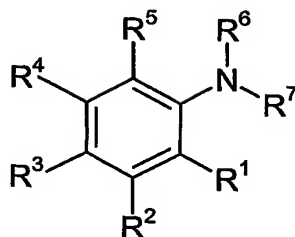


What is claimed is:

1. A compound of formula (I):



(I)

- 5 including salts, solvates, and physiologically functional derivatives thereof, wherein R¹ is H, cyano, nitro, halogen, haloalkyl, alkyl, alkenyl, alkynyl, hydroxy, alkoxy, haloalkoxy, -OC(O)R⁸, or aryl;
 R² is H, cyano, nitro, halogen, haloalkyl, alkyl, alkenyl, alkynyl, hydroxy, alkoxy, haloalkoxy, -OC(O)R⁸, or aryl;
- 10 R³ is cyano, nitro, halogen, haloalkyl, heterocyclyl, hydroxy, alkoxy, haloalkoxy, -OC(O)R⁸, -C(O)₂R⁸, -CONHR⁸, -C(O)R⁸, -S(O)_nR⁸, -SO₂N(R⁸)₂, -NHC(O)R⁸, or -NHSO₂R⁸;
 R⁴ is H, cyano, nitro, halogen, haloalkyl, alkyl, alkenyl, alkynyl, hydroxy, alkoxy, haloalkoxy, -OC(O)R⁸, or aryl;
- 15 R⁵ is H, cyano, nitro, halogen, haloalkyl, alkyl, alkenyl, alkynyl, hydroxy, alkoxy, haloalkoxy, -OC(O)R⁸, or aryl;
 where at least one of R¹, R², R⁴, and R⁵ is not H;
 each of R⁶ and R⁷ independently are selected from H or -(R^a)_x-R⁹;
 R^a is a C₁-C₈ alkylene chain, where x is 0 or 1;
- 20 each R⁸ independently is H, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, aralkyl, heteroaryl, or heteroaralkyl;
 R⁹ is alkyl, haloalkyl, hydroxyalkyl, alkenyl, alkynyl, alkoxy, alkylthio, haloalkoxy, cycloalkyl, formyl, azido, or -NR¹⁰R¹¹;
 R¹⁰ and R¹¹ each independently are H, alkyl, -C(O)H, -C(O)R¹², -C(O)OR¹², or -SO₂R¹²; and R¹² is alkyl.
- 25
2. The compound of claim 1 wherein R¹, R⁵, or both are H.
3. The compound of claim 1 wherein R², R⁴, or both are H.
4. The compound of claim 1 wherein alkyl is C₁-C₆ alkyl.
5. The compound of claim 4 wherein alkyl is C₁-C₃ alkyl
- 30 6. The compound of claim 1 wherein alkoxy is C₁-C₆ alkoxy.
7. The compound of claim 6 wherein alkoxy is C₁-C₂ alkoxy.

8. The compound of claim 1 wherein haloalkyl is C₁-C₆ haloalkyl.
9. The compound of claim 8 wherein haloalkyl is trifluoromethyl or trifluoroethyl.
10. The compound of claim 1 wherein alkenyl is C₂-C₆ alkenyl.
11. The compound of claim 10 wherein alkenyl is isopropenyl, isobutenyl, or allyl.
- 5 12. The compound of claim 1 wherein alkynyl is C₂-C₆ alkynyl.
13. The compound of claim 12 wherein alkynyl is propynyl.
14. The compound of claim 1 wherein cycloalkyl is C₃-C₆ cycloalkyl.
15. The compound of claim 14 wherein cycloalkyl is cyclopropyl, cyclopentyl, or cyclohexyl.
- 10 16. The compound of claim 1 wherein R¹ or R⁵ is nitro, alkyl, haloalkyl, or halogen.
17. The compound of claim 1 wherein R² or R⁴ is nitro, cyano, alkyl, haloalkyl, halogen, or hydroxy.
18. The compound of claim 1 wherein R³ is cyano, nitro, or halogen.
- 15 19. The compound of claim 18 wherein one or more of R¹, R², R⁴, or R⁵ is haloalkyl.
20. The compound of claim 19 wherein R² or R⁴ is haloalkyl.
21. The compound of claim 18 wherein one or more of R¹, R², R⁴, or R⁵ is halogen.
- 20 22. The compound of claim 21 wherein R² or R⁴ is halogen.
23. The compound of claim 22 wherein halogen is chloro.
24. The compound of claim 18 wherein when R³ is cyano, one or more of R¹, R², R⁴, or R⁵ is nitro.
25. The compound of claim 18 wherein when R³ is nitro, one or more of R¹, R², R⁴, or R⁵ is cyano.
- 25 26. The compound of claim 18 wherein R³ is cyano and one of R² or R⁴ is cyano.
27. The compound of claim 1 wherein R^a is a substituted alkylene, substituted with one or more of alkyl, alkenyl, or hydroxyl.
28. The compound of claim 27 wherein R^a is methylene.
- 30 29. A compound selected from:
 - 4-[(Cyclopropylmethyl)(propyl)amino]-2-(trifluoromethyl)benzonitrile
 - 4-[(cyclopropylmethyl)(propyl)amino]-2-nitrobenzonitrile
 - 4-(diallylamino)-2-(trifluoromethyl)benzonitrile
 - 5-[allyl(cyclopentyl)amino]-2-nitrobenzonitrile
 - 35 4-[butyl(propyl)amino]-2-nitrobenzonitrile

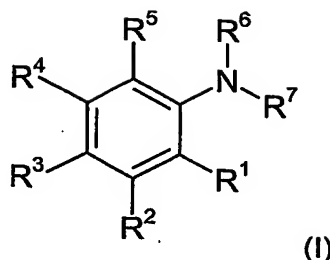
- 4-[ethyl(2-methyl-2-propenyl)amino]-2-nitrobenzonitrile
4-[butyl(ethyl)amino]-2-(trifluoromethyl)benzonitrile
4-(dipropylamino)-2-(trifluoromethyl)benzonitrile
N-butyl-N-ethyl-3-methyl-4-nitroaniline
- 5 5-(diallylamino)-2-nitrobenzonitrile
5-[(cyclopropylmethyl)(propyl)amino]-2-nitrobenzonitrile
4-(diallylamino)-2-nitrobenzonitrile
3-methyl-4-nitro-N,N-dipropylaniline
4-[sec-butyl(propyl)amino]-2-nitrobenzonitrile
- 10 5-[butyl(ethyl)amino]-2-nitrobenzonitrile
2-chloro-4-[(cyclopropylmethyl)(propyl)amino]benzonitrile
5-[butyl(propyl)amino]-2-nitrobenzonitrile
5-[(2-methoxyethyl)(methyl)amino]-2-nitrobenzonitrile
2-chloro-4-(diallylamino)benzonitrile
- 15 4-[(2-methoxyethyl)(propyl)amino]-2-nitrobenzonitrile
4-[allyl(cyclopentyl)amino]-2-nitrobenzonitrile
4-[ethyl(2-methyl-2-propenyl)amino]-2-(trifluoromethyl)benzonitrile
2-chloro-4-[[2-(dimethylamino)ethyl](methyl)amino]benzonitrile
N-(2-methoxyethyl)-N,2-dimethyl-4-nitroaniline
- 20 N-allyl-N-cyclopentyl-4-nitro-3-(trifluoromethyl)aniline
5-(dipropylamino)-2-nitrophenol
2-chloro-4-(dipropylamino)benzonitrile
5-[ethyl(2-methyl-2-propenyl)amino]-2-nitrobenzonitrile
N,N-diallyl-4-nitro-3-(trifluoromethyl)aniline
- 25 N,N-diallyl-2-methyl-4-nitroaniline
5-[(cyclopropylmethyl)(propyl)amino]-2-nitrophenol
N-(2-methoxyethyl)-3-methyl-4-nitro-N-propylaniline
4-[butyl(propyl)amino]-2-chlorobenzonitrile
N-butyl-2-chloro-N-methyl-4-nitroaniline
- 30 4-(dipropylamino)-2-nitrobenzonitrile
2-chloro-4-[(2-methoxyethyl)(propyl)amino]benzonitrile
N,N-diallyl-3-methyl-4-nitroaniline
N-(sec-butyl)-4-nitro-N-propyl-3-(trifluoromethyl)aniline
4-(dipentylamino)-2-nitrobenzonitrile
- 35 N-(cyclopropylmethyl)-3-methyl-4-nitro-N-propylaniline

- 5-(dipropylamino)-2-nitrobenzonitrile
N,N-dibutyl-4-nitro-3-(trifluoromethyl)aniline
N1-(2-chloro-4-nitrophenyl)-N1,N2,N2-trimethyl-1,2-ethanediamine
5-[sec-butyl(propyl)amino]-2-nitrobenzonitrile
5 N-ethyl-N-(2-methyl-2-propenyl)-4-nitro-3-(trifluoromethyl)aniline
N-(2-methoxyethyl)-4-nitro-N-propyl-3-(trifluoromethyl)aniline
4-[butyl(ethyl)amino]-2-chlorobenzonitrile
5-(dibutylamino)-2-nitrobenzonitrile
4-[butyl(ethyl)amino]-2-nitrobenzonitrile
10 4-[(2-methoxyethyl)(propyl)amino]-2-(trifluoromethyl)benzonitrile
5-[(2-methoxyethyl)(propyl)amino]-2-nitrobenzonitrile
4-[allyl(cyclopentyl)amino]-2-(trifluoromethyl)benzonitrile
4-[butyl(propyl)amino]-2-(trifluoromethyl)benzonitrile
N,N-dibutyl-3-methyl-4-nitroaniline
15 4-[methyl(octyl)amino]-2-nitrobenzonitrile
4-(dibutylamino)-2-(trifluoromethyl)benzonitrile
N-(cyclopropylmethyl)-4-nitro-N-propyl-2-(trifluoromethyl)aniline
N-allyl-N-cyclohexyl-4-nitro-3-(trifluoromethyl)aniline
4-[(2-methoxyethyl)(methyl)amino]-3-(trifluoromethyl)benzonitrile
20 4-(diallylamino)-3-nitrobenzonitrile
N-1-(2-chloro-4-nitrophenyl)-N1,N3,N3-trimethyl-1,3-propanediamine
N,N-bis(2-methoxyethyl)-4-nitro-3-(trifluoromethyl)aniline
4-[sec-butyl(propyl)amino]-2-(trifluoromethyl)benzonitrile
2-chloro-4-[ethyl(2-methyl-2-propenyl)amino]benzonitrile
25 N-cyclohexyl-N-ethyl-4-nitro-3-(trifluoromethyl)aniline
2-chloro-4-(dibutylamino)benzonitrile
4-[cyclohexyl(ethyl)amino]-2-nitrobenzonitrile
4-[bis(2-ethoxyethyl)amino]-3-chlorobenzonitrile
2-chloro-N-(2-methoxyethyl)-N-methyl-4-nitroaniline
30 N-butyl-N-ethyl-4-nitro-3-(trifluoromethyl)aniline
N-(sec-butyl)-3-methyl-4-nitro-N-propylaniline
N-(2-methoxyethyl)-N-methyl-4-nitro-2-(trifluoromethyl)aniline
4-[bis[3-(dimethylamino)propyl]amino]-2-(trifluoromethyl)benzonitrile
N-(cyclopropylmethyl)-4-nitro-N-propyl-3-(trifluoromethyl)aniline
35 4-[(methyl)(octyl)amino]-2-(trifluoromethyl)benzonitrile

- 4-(propylamino)-2-(trifluoromethyl)benzonitrile
4-nitro-N-propyl-3-(trifluoromethyl)aniline
3-[[4-nitro-3-(trifluoromethyl)phenyl]amino]propan-1-ol
4-[(3-hydroxypropyl)amino]-2-(trifluoromethyl)benzonitrile
5 4-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]-2-(trifluoromethyl)benzonitrile
4-(dimethylamino)-2-(trifluoromethyl)benzonitrile
4-(diethylamino)-2-(trifluoromethyl)benzonitrile
4-[methyl(2-methylpropyl)amino]-2-(trifluoromethyl)benzonitrile
4-[(cyclopropylmethyl)amino]-2-(trifluoromethyl)benzonitrile
10 4-[(cyclopropylmethyl)(3-hydroxypropyl)amino]-2-(trifluoromethyl)benzonitrile
4-[(cyclopropylmethyl)(2-hydroxyethyl)amino]-2-(trifluoromethyl)benzonitrile
N-(cyclopropylmethyl)-4-nitro-3-(trifluoromethyl)aniline
3-[(cyclopropylmethyl)[4-nitro-3-(trifluoromethyl)phenyl]amino]-1-propanol
2-[(cyclopropylmethyl)[4-nitro-3-(trifluoromethyl)phenyl]amino]ethanol
15 4-[(cyclopropylmethyl)amino]-3-(trifluoromethyl)benzonitrile
1-[4-[(cyclopropylmethyl)(propyl)amino]-2-(trifluoromethyl)phenyl]ethanone
4-[(1-cyclopropylethyl)amino]-2-(trifluoromethyl)benzonitrile
4-[allyl(1-cyclopropylethyl)amino]-2-(trifluoromethyl)benzonitrile
4-[(2,2-dimethylpropyl)amino]-2-(trifluoromethyl)benzonitrile
20 4-[(2,2-dimethylpropyl)(3-hydroxypropyl)amino]-2-(trifluoromethyl)benzonitrile
4-[(2,2-dimethylpropyl)(2-propen-1-yl)amino]-2-(trifluoromethyl)benzonitrile
4-[(2,3-dihydroxypropyl)(2,2-dimethylpropyl)amino]-2-(trifluoromethyl)benzonitrile
4-[(2,2-dimethylpropyl)(2-oxoethyl)amino]-2-(trifluoromethyl)benzonitrile
4-[(2,2-dimethylpropyl)(2-hydroxyethyl)amino]-2-(trifluoromethyl)benzonitrile
25 4-[(2,2-dimethylpropyl)(propyl)amino]-2-(trifluoromethyl)benzonitrile
4-[(1,1-dimethylethyl)amino]-2-(trifluoromethyl)benzonitrile
N-(1,1-dimethylethyl)-4-nitro-3-(trifluoromethyl)aniline
N-(cyclopropylmethyl)-N-(1,1-dimethylethyl)-4-nitro-3-(trifluoromethyl)aniline
4-[(1,1-dimethylethyl)(2-propen-1-yl)amino]-2-(trifluoromethyl)benzonitrile
30 4-[(1,1-dimethylethyl)(2-oxoethyl)amino]-2-(trifluoromethyl)benzonitrile
4-[(1,1-dimethylethyl)(propyl)amino]-2-(trifluoromethyl)benzonitrile
4-[(3-hydroxypropyl)[(1S)-1-methylpropyl]amino]-2-(trifluoromethyl)benzonitrile
2-(trifluoromethyl)-4-[(3,3,3-trifluoropropyl)amino]benzonitrile
4-[bis(2-fluoroethyl)amino]-2-(trifluoromethyl)benzonitrile
35 4-[(2,2,2-trifluoroethyl)amino]-2-(trifluoromethyl)benzonitrile

- 4-nitro-N-(2,2,2-trifluoroethyl)-3-(trifluoromethyl)aniline
 4-[(3-hydroxypropyl)(2,2,2-trifluoroethyl)amino]-2-(trifluoromethyl)benzonitrile
 4-[(3-hydroxypropyl)(2,2,2-trifluoroethyl)amino]-3-(trifluoromethyl)benzonitrile
 4-bromo-N,N-bis(2,2,2-trifluoroethyl)-3-(trifluoromethyl)aniline
 5 4-[bis(2,2,2-trifluoroethyl)amino]-2-(trifluoromethyl)benzonitrile
 4-[(2,2-difluoroethyl)(2,2,2-trifluoroethyl)amino]-2-(trifluoromethyl)benzonitrile
 bis(2,2,2-trifluoroethyl)[2-(trifluoromethyl)-4-biphenyl]amine
 4-[(2-hydroxyethyl)(2,2,2-trifluoroethyl)amino]-2-(trifluoromethyl)benzonitrile
 4-[[2-(methyloxy)ethyl](2,2,2-trifluoroethyl)amino]-2-(trifluoromethyl)benzonitrile
 10 4-[[2-(ethyloxy)ethyl](2,2,2-trifluoroethyl)amino]-2-(trifluoromethyl)benzonitrile
 4-[(2,2,2-trifluoroethyl){2-[(2,2,2-trifluoroethyl)oxy]ethyl}amino]-2-(trifluoromethyl)benzonitrile
 4-[methyl(2,2,2-trifluoroethyl)amino]-2-(trifluoromethyl)benzonitrile
 4-[ethyl(2,2,2-trifluoroethyl)amino]-2-(trifluoromethyl)benzonitrile
 15 4-[propyl(2,2,2-trifluoroethyl)amino]-2-(trifluoromethyl)benzonitrile
 4-[butyl(2,2,2-trifluoroethyl)amino]-2-(trifluoromethyl)benzonitrile
 4-[(2-methylprop-2-enyl)(2,2,2-trifluoroethyl)amino]-2-(trifluoromethyl)benzonitrile
 4-[isobutyl(2,2,2-trifluoroethyl)amino]-2-(trifluoromethyl)benzonitrile
 4-[(3-methylbut-2-enyl)(2,2,2-trifluoroethyl)amino]-2-(trifluoromethyl)benzonitrile
 20 4-[isopentyl(2,2,2-trifluoroethyl)amino]-2-(trifluoromethyl)benzonitrile
 4-[prop-2-ynyl(2,2,2-trifluoroethyl)amino]-2-(trifluoromethyl)benzonitrile
 4-[(2-fluoroethyl)(2,2,2-trifluoroethyl)amino]-2-(trifluoromethyl)benzonitrile
 4-[[2-(methylthio)ethyl](2,2,2-trifluoroethyl)amino]-2-(trifluoromethyl)benzonitrile
 4-[(2-azidoethyl)(2,2,2-trifluoroethyl)amino]-2-(trifluoromethyl)benzonitrile
 25 N-{2-[[4-cyano-3-(trifluoromethyl)phenyl](2,2,2-trifluoroethyl)amino]ethyl} acetamide
 methyl 2-[[4-cyano-3-(trifluoromethyl)phenyl](2,2,2-trifluoroethyl)amino]ethylcarbamate
 tert-butyl 2-[[4-cyano-3-(trifluoromethyl)phenyl](2,2,2-trifluoroethyl)amino]ethylcarbamate
 30 N-{2-[[4-cyano-3-(trifluoromethyl)phenyl](2,2,2-trifluoroethyl)amino]ethyl}
 methanesulfonamide; and
 4-(dipropylamino)phthalonitrile.

30. A compound of formula (I):



- 5 including salts, solvates, and physiologically functional derivatives thereof, wherein
 R^1 is H, cyano, nitro, halogen, haloalkyl, alkyl, alkenyl, alkynyl, hydroxy, alkoxy, haloalkoxy, $-OC(O)R^8$, or aryl;
 R^2 is H, cyano, nitro, halogen, haloalkyl, alkyl, alkenyl, alkynyl, hydroxy, alkoxy, haloalkoxy, $-OC(O)R^8$, or aryl;
 10 R^3 is cyano, nitro, halogen, haloalkyl, heterocyclyl, hydroxy, alkoxy, haloalkoxy, $-OC(O)R^8$, $-C(O)_2R^8$, $-CONHR^8$, $-C(O)R^8$, $-S(O)_nR^8$, $-SO_2N(R^8)_2$, $-NHC(O)R^8$, or $-NHSO_2R^8$;
 R^4 is H, cyano, nitro, halogen, haloalkyl, alkyl, alkenyl, alkynyl, hydroxy, alkoxy, haloalkoxy, $-OC(O)R^8$, or aryl;
 15 R^5 is H, cyano, nitro, halogen, haloalkyl, alkyl, alkenyl, alkynyl, hydroxy, alkoxy, haloalkoxy, $-OC(O)R^8$, or aryl;
 each of R^6 and R^7 independently are selected from H or $-(R^a)_x-R^9$;
 R^a is a C_1 - C_8 alkylene chain, where x is 0 or 1;
 each R^8 independently is H, alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl,
 20 aralkyl, heteroaryl, or heteroaralkyl;
 R^9 is alkyl, haloalkyl, hydroxyalkyl, alkenyl, alkynyl, alkoxy, alkylthio, haloalkoxy, cycloalkyl, formyl, azido, or $-NR^{10}R^{11}$;
 R^{10} and R^{11} each independently are H, alkyl, $-C(O)H$, $-C(O)R^{12}$, $-C(O)OR^{12}$, or $-SO_2R^{12}$; and R^{12} is alkyl.
 25 31. The compound of claim 30 wherein each of R^1 , R^2 , R^4 , and R^5 are H.
 32. The compound of claim 30 wherein R^3 is cyano or nitro.
 33. The compound of claim 30 wherein the compound is:
 N,N-diallyl-4-nitroaniline
 N-(cyclopropylmethyl)-4-nitro-N-propylaniline
 30 4-(dipropylamino)benzonitrile; or
 4-nitro-N,N-dipropylaniline.

34. The compound of claims 1-33 substantially as hereinbefore defined with reference to any one of the Examples.
35. A pharmaceutical composition comprising a compound according to claims 1 to 33, and a pharmaceutically acceptable carrier.
- 5 36. A compound according to claims 1 to 33 for use as an active therapeutic substance.
37. A compound according to claims 1 to 33 for use in the treatment or prophylaxis of conditions or disorders that respond to selective androgen receptor modulation.
- 10 38. A compound according to claims 1 to 33 for use in the treatment or prophylaxis of osteoporosis, muscle wasting, frailty, cardiovascular disease, breast cancer, uterine cancer, prostate hyperplasia, prostate cancer, dyslipidemia, menopausal vasomotor conditions, urinary incontinence, arteriosclerosis, libido enhancement, depression, uterine fibroid disease, aortic smooth muscle cell proliferation, endometriosis, or ADAM.
- 15 39. Use of a compound according to claims 1 to 33 in the manufacture of a medicament for use in the treatment or prophylaxis of conditions or disorders that respond to selective androgen receptor modulation.
- 20 40. Use of a compound according to any one of claims 1 to 33 in the manufacture of a medicament for use in the treatment or prophylaxis of osteoporosis, muscle wasting, frailty, cardiovascular disease, breast cancer, uterine cancer, prostatic hyperplasia, prostate cancer, dyslipidemia, menopausal vasomotor conditions, urinary incontinence, arteriosclerosis, libido enhancement, depression, uterine fibroid disease, aortic smooth muscle cell proliferation, endometriosis, or ADAM.
- 25 41. A method for the treatment or prophylaxis of conditions or disorders that respond to selective androgen receptor modulation comprising the administration of a compound according to any one of claims 1 to 33.
- 30 42. A method for the treatment or prophylaxis of osteoporosis, muscle wasting, frailty, cardiovascular disease, breast cancer, uterine cancer, prostatic hyperplasia, prostate cancer, dyslipidemia, menopausal vasomotor conditions, urinary incontinence, arteriosclerosis, libido enhancement, depression, uterine fibroid disease, aortic smooth muscle cell proliferation, endometriosis, or ADAM comprising the administration of a compound according to any one of claims 1 to 33.
- 35